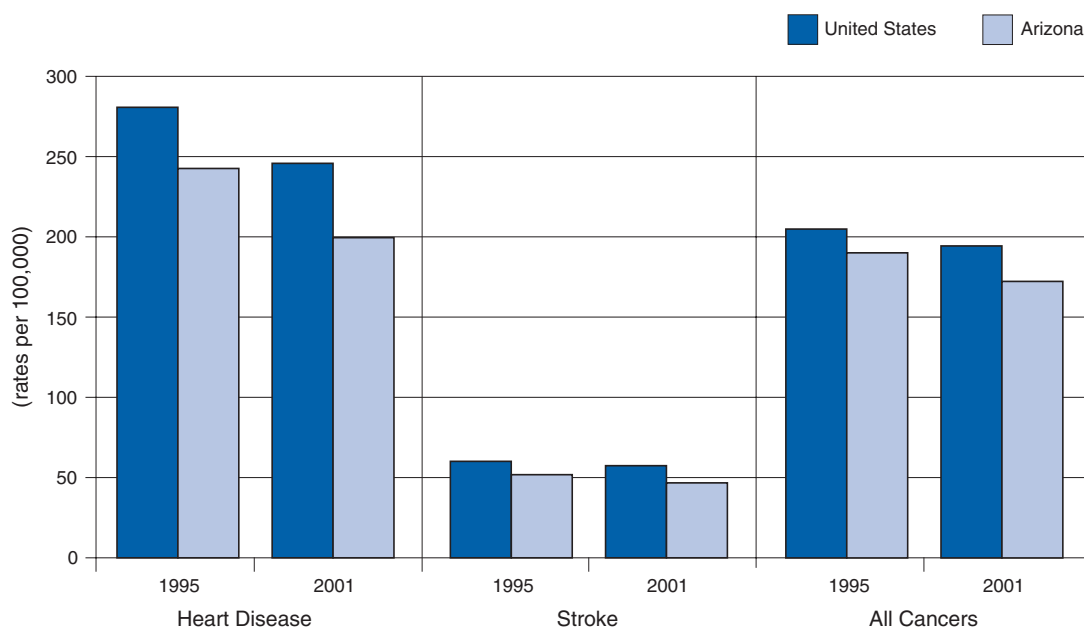


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Arizona, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

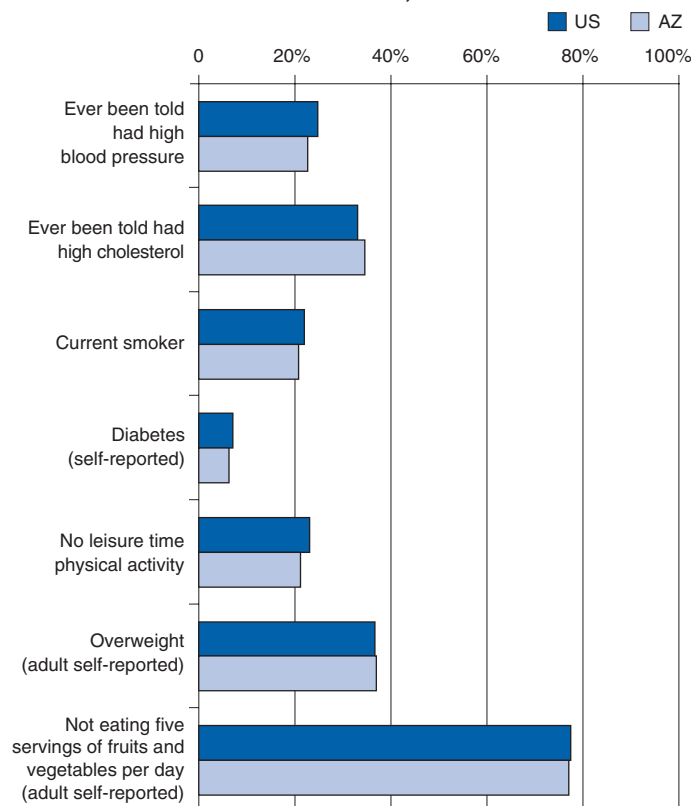
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Arizona, accounting for 10,588 deaths or approximately 26% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 2,480 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,710 are expected in Arizona. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 23,560 new cases that are likely to be diagnosed in Arizona.

Estimated Cancer Deaths, 2004

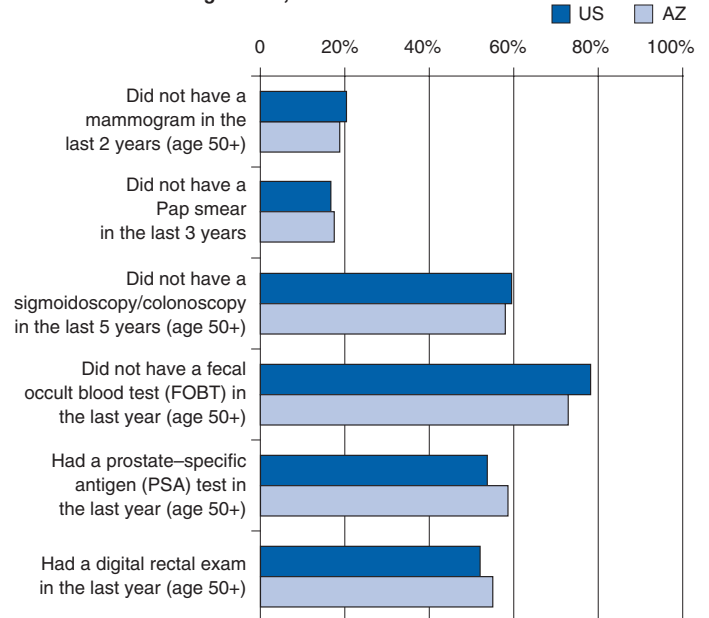
Cause of death	US	AZ
All Cancers	563,700	9,710
Breast (female)	40,110	740
Colorectal	56,730	960
Lung and Bronchus	160,440	2,550
Prostate	29,900	510

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Arizona's Chronic Disease Program Accomplishments

Examples of Arizona's Prevention Successes

- Statistically significant decreases in cancer deaths across all races from 1990 to 2000 (247.4 per 100,000 in 1990 versus 213.1 per 100,000 in 2000 for men; 161.7 per 100,000 in 1990 versus 151.8 per 100,000 in 2000 for women).
- A 14.5% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 33.3% in 1992 to 18.8% in 2002).
- A lower prevalence rate than the corresponding national rate for individuals who had been told they are at risk for high blood pressure (22.7% in Arizona versus 24.8% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Arizona in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Arizona, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Arizona BRFSS</i>	\$159,239
National Program of Cancer Registries <i>Arizona Cancer Registry</i>	\$324,980
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	\$0
Diabetes Control Program <i>Arizona Diabetes Council</i>	\$243,927
National Breast and Cervical Cancer Early Detection Program <i>Well Woman Health Check</i>	\$2,108,851
National Comprehensive Cancer Control Program <i>Arizona Comprehensive Cancer Control</i>	\$148,834
WISEWOMAN	
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>Arizona Tobacco Prevention and Control</i>	\$101,031
State Nutrition and Physical Activity/Obesity Prevention Program <i>Arizona Promoting Lifetime Activity for Youth (PLAY)</i> <i>Awards Program</i> <i>WELL AZ</i> <i>Eat and Play the Native Way</i>	\$321,253
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$3,408,115

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Arizona that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Cancer

After heart disease, cancer is the second leading cause of death in Arizona. Most cancer cases affect adults in middle age; about 80% of all cases in Arizona are diagnosed at age 55 and older. The rates for breast, colon, lung and bronchus, rectal, and prostate cancer are similar to national trends—they account for more than half of Arizona's cancer burden. Between 1995 and 2000, these cancers accounted for 60% of the 19,716 new cases diagnosed in Arizona and 40% of the 8,503 cancer deaths in the state. The overall cancer incidence rate in Arizona is 409.2 per 100,000, and the overall death rate in Arizona is 177.3 per 100,000. The American Cancer Society estimates that about one third of the cancer deaths expected to occur in 2004 will be related to nutrition, physical inactivity, obesity, and other preventable lifestyle factors. For the majority of Americans who do not use tobacco products, nutrition and physical activity are the most important modifiable determinants of cancer risk.

Cancer Risks

Physical Activity: Arizona has experienced success in increasing rates of physical activity. According to 2003 data from the Behavioral Risk Factor Surveillance System (BRFSS), 21.2% of Arizonans reported that they engage in no leisure time physical activity, compared with 51.3% in 1998. To continue this trend, Arizona has implemented several programs to further encourage physical activity, including *P.L.A.Y. (Promoting Lifetime Activity for Youth)*, a teacher-directed program that encourages fourth through eighth graders to participate in 60 minutes of daily, independent physical activity. Another program, *W.E.L.L. (Walk Everyday & Live Longer)*, is a 4-week community-based intervention aimed at increasing physical activity among sedentary residents.

Nutrition: Data indicate that the nutritional status of Arizonans is also a significant concern. For example, 2003 BRFSS data indicate that 37.0% of Arizonans had a body mass index greater than 25, which is considered overweight, and only 22.9% of Arizona residents report eating 5 or more fruits and vegetables per day. To reverse these trends, Arizona has formed the *Arizona Nutrition Network*, a group of public and private organizations that is using a social marketing campaign to promote healthy eating habits to lower-income Arizonans.

Text adapted from *Arizona Cancer Facts and Figures 2004-2005: A Source Book for Planning and Implementing Programs for Cancer Prevention and Control*.

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is twice the national rate. In addition to high poverty levels, AI/ANs are experiencing increasing health disparities.

Arizona's AI/ANs, who represent 5% of the state's population, also experience significant disparities in comparison with other ethnic groups. In Arizona, the average age at death for AI/ANs is 55, compared with 72 for whites. The leading causes of death for AI/ANs are heart disease and cancer, the same as for other populations. According to data from the Indian Health Service, in Arizona, heart disease was the cause of death for between 15.4% and 16.7% of AI/ANs in the Navajo, Phoenix, and Tucson areas between 1994 and 1996, followed by cancer (between 12.2% and 10.4%), diabetes (between 7.6% and 5.6%), and alcohol-related illnesses (between 9.1% and 7.2%).

While these death rates for AI/ANs in Arizona are similar to national rates, Arizona's AI/ANs are experiencing increasing death rates for these chronic diseases as other populations are seeing improvements.

Text adapted from "Indian Health Care: Separate, Unequal," *The Arizona Republic*, April 14, 2002.

Other Disparities

- **Diabetes:** Hispanics (7.3%) are more likely to report having been told they have diabetes than whites (6.0%).
- **Physical Activity:** Hispanics (57.9%) are more likely to report not meeting the recommended guidelines for moderate physical activity than whites (49.3%).
- **Heart Disease:** The heart disease death rate for AI/ANs in Arizona is higher than the national rate of heart disease deaths for AI/ANs (403 per 100,000 in Arizona versus 352 per 100,000 nationally). The heart disease death rate for Hispanics in Arizona is higher than the national rate of heart disease deaths for Hispanics (401 per 100,000 in Arizona versus 348 per 100,000 nationally).
- **Cervical Cancer:** In Arizona, AI/ANs and Hispanics have higher cervical cancer death rates than whites (5.2 per 100,000 for AI/AN women and 3.4 per 100,000 for Hispanic women, compared with 2.4 per 100,000 for white women).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
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